

EFFECTS OF BEAM CONDITIONING ON GAS-FILLED HOHLRAUM PERFORMANCE* R. L. Kauffman, L. V. Powers, S. G. Glendinning, T. Orzechowski, L. J. Suter, R. L. Berger, S. Dixit, B. A. Hammel, D. E. Hinkel, R. K. Kirkwood, H. N. Kornblum, O. L. Landen, B. J. MacGowan, D. Pennington, T. D. Shepard, and E. A. Williams, *Lawrence Livermore National Laboratory, Livermore, California 94551*; D. Juraszek, A. L. Richard and M. A. Blain, *Centre d'Etudes de Limeil-Valenton, Villeneuve-St. Georges FRANCE*; Kinoform phase plates (KPP) and SSD are being fielded on ten beams of Nova to test the effects of beam smoothing on x-ray drive and radiation symmetry in gas-filled hohlraums. Previous experiments without beam conditioning showed that drive is reduced with high levels of SRS and SBS backscatter and radiation symmetry differs from vacuum hohlraums and computer simulations. Preliminary results with a single beam indicate that a KPP alone reduces scattered light levels and improves the radiation symmetry. Results from integrated experiments in which all 10 beams have KPP, and in some cases SSD smoothing, will be presented. * Work performed under the auspices of the United States Department of Energy by the Lawrence Livermore National Laboratory under contract number W-7405-ENG-48.